



SEQUENCE LISTING

<110> NEELAM, Beena et al

<120> ISOLATED HUMAN RAS-LIKE PROTEINS,
NUCLEIC ACID MOLECULES ENCODING THESE HUMAN RAS-LIKE
PROTEINS, AND USES THEREOF

<130> CL001112

<140> 09/778,963

<141> 2001-02-08

<160> 5

<170> FastSEQ for Windows Version 4.0

02/28/2023 - 0500011
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| accatcgagg | acttccaccc | taaggtaatac | aacatccgcg | gcatgcgttgc | ccagctcgac | 420 |
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 35 40 45
 Thr Pro Thr Ile Glu Asp Phe His Arg Lys Val Tyr Asn Ile Arg Gly
 50 55 60
 Asp Met Tyr Gln Leu Asp Ile Leu Asp Thr Ser Gly Asn His Pro Phe
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 Pro Ala Met Arg Arg Leu Ser Ile Leu Thr Gly Asp Val Phe Ile Leu
 85 90 95
 Val Phe Ser Leu Asp Asn Arg Glu Ser Phe Asp Glu Val Lys Arg Leu
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 Gln Lys Gln Ile Leu Glu Val Lys Ser Cys Leu Lys Asn Lys Thr Lys
 115 120 125
 Glu Ala Ala Glu Leu Pro Met Val Ile Cys Gly Asn Lys Asn Asp His
 130 135 140
 Gly Glu Leu Cys Arg Gln Val Pro Thr Thr Glu Ala Glu Leu Leu Val
 145 150 155 160
 Ser Gly Asp Glu Asn Ser Ala Tyr Phe Glu Val Ser Ala Lys Lys Asn
 165 170 175
 Thr Asn Val Asp Glu Met Phe Tyr Val Leu Phe Ser Met Ala Lys Leu
 180 185 190
 Pro His Glu Met Ser Pro Ala Leu His Arg Lys Ile Ser Val Gln Tyr
 195 200 205
 Gly Asp Ala Phe His Pro Arg Pro Phe Cys Met Arg Arg Val Lys Glu
 210 215 220
 Met Asp Ala Tyr Gly Met Val Ser Pro Phe Ala Arg Arg Pro Ser Val
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| Gly | Gly | Gly |
| Gly | Gly | Thr |
| Cys | Thr | Thr |
| Ala | Ala | Ala |
| Cys | Thr | Ala |
| Ala | Cys | Cys |
| Thr | Ala | Cys |
| 835 | 840 | 845 |
| 850 | 855 | 860 |
| Cys | Cys | Thr |
| Thr | Thr | Gly |
| Thr | Thr | Thr |
| Gly | Ala | Ala |
| 865 | 870 | 875 |
| 880 | 885 | 890 |
| 895 | 890 | 895 |
| Ala | Gly | Cys |
| Gly | Thr | Ala |
| Ala | Cys | Gly |
| Thr | Cys | Ala |
| 895 | 890 | 895 |
| 900 | 905 | 910 |
| Gly | Ala | Cys |
| Cys | Ala | Cys |
| Cys | Thr | Gly |
| Gly | Gly | Gly |
| Ala | Thr | Cys |
| 915 | 920 | 925 |
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| Thr | Cys | Thr |
| Cys | Thr | Cys |
| Thr | Gly | Cys |
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| Ala | Cys | Ala |
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| Ala | Ala | Cys |
| Cys | Thr | Cys |
| Thr | Cys | Thr |
| Gly | Ala | Gly |
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| 980 | 985 | 990 |
| 990 | 980 | 985 |
| Ala | Gly | Thr |
| Thr | Thr | Cys |
| Cys | Thr | Ala |
| 995 | 1000 | 1005 |
| 1005 | 995 | 1000 |
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| Gly | Ala | Ala |
| Ala | Ala | Thr |
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| Cys | Thr | Gly |
| Gly | Cys | Thr |
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| 1040 | 1025 | 1030 |
| Thr | Thr | Ala |
| Ala | Thr | Gly |
| Ala | Ala | Gly |
| Gly | Gly | Ala |
| Ala | Ala | Ala |
| 1045 | 1050 | 1055 |
| 1055 | 1045 | 1050 |
| Ala | Gly | Gly |
| Thr | Thr | Ala |
| Ala | Ala | Cys |
| 1060 | 1065 | 1070 |
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| Ala | Gly | Cys |
| Ala | Cys | Thr |
| Thr | Ala | Gly |
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| 1075 | 1080 | 1085 |
| 1085 | 1075 | 1080 |
| Thr | Gly | Gly |
| Cys | Ala | Thr |
| Ala | Thr | Ala |
| 1090 | 1095 | 1100 |
| 1100 | 1090 | 1095 |
| Cys | Ala | Ala |
| Ala | Ala | Ala |
| Ala | Ala | Thr |
| Gly | Ala | Ala |
| 1105 | 1110 | 1115 |
| 1120 | 1105 | 1110 |
| Thr | Ala | Thr |
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| Ala | Thr | Thr |
| Ala | Ala | Thr |
| 1125 | 1130 | 1135 |
| 1135 | 1125 | 1130 |
| Cys | Thr | Thr |
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| Gly | Thr | Gly |
| 1140 | 1145 | 1150 |
| 1150 | 1140 | 1145 |
| Gly | Cys | Ala |
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| Cys | Thr | Gly |
| Gly | Cys | Ala |
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| Cys | Ala | Ala |
| Gly | Thr | Gly |
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| Ala | Gly | Cys |
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| Thr | Cys | Gly |
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| Cys | Thr | Gly |
| 1185 | 1190 | 1195 |
| 1200 | 1185 | 1190 |
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| Cys | Thr | Gly |
| Gly | Gly | Gly |
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| Ala | Gly | Cys |
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| Ala | Thr | Thr |
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| Cys Cys Cys Ala Thr Thr Gly Cys Ala Gly Thr Thr Cys Ala Gly | | |
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| 1825 | 1830 | 1835 |
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| 1845 | 1850 | 1855 |
| Cys Thr Thr Cys Ala Gly Ala Gly Cys Ala Gly Gly Thr Gly | | |
| 1860 | 1865 | 1870 |
| Gly Cys Ala Cys Thr Thr Gly Ala Gly Cys Cys Ala Gly Ala Cys Cys | | |
| 1875 | 1880 | 1885 |
| Cys Thr Gly Ala Ala Ala Cys Ala Thr Ala Ala Gly Gly Gly Ala | | |
| 1890 | 1895 | 1900 |
| Ala Gly Ala Gly Gly Thr Gly Thr Thr Cys Thr Gly Cys Ala Gly | | |
| 1905 | 1910 | 1915 |
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| 1925 | 1930 | 1935 |
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| 1955 | 1960 | 1965 |
| Ala Cys Thr Gly Ala Cys Gly Ala Gly Gly Thr Gly Ala Cys Thr | | |
| 1970 | 1975 | 1980 |
| Gly Gly Gly Gly Thr Cys Ala Gly Gly Gly Thr Thr Cys Thr Gly | | |
| 1985 | 1990 | 1995 |
| Gly Gly Gly Cys Gly Gly Gly Ala Thr Thr Cys Thr Gly Gly Thr | | |
| 2005 | 2010 | 2015 |
| Gly Gly Gly Cys Gly Cys Thr Ala Ala Gly Gly Thr Ala Gly Gly Ala | | |
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| 2035 | 2040 | 2045 |
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| 2180 | 2185 | 2190 |

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2245 2250 2255
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2275 2280 2285
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2435 2440 2445
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2450 2455 2460
Ala Gly Ala Ala Cys Cys Ala Cys Cys Cys Cys Thr Gly Cys Cys
2465 2470 2475 2480
Cys Cys Ala Gly Gly Cys Thr Thr Ala Ala Gly Ala Ala Thr Gly
2485 2490 2495
Cys Ala Thr Gly Cys Thr Ala Gly Thr Gly Cys Cys Thr Thr Cys Cys
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Cys Cys Ala Thr Thr Thr Thr Gly Ala Gly Ala Thr Thr Thr Cys
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Thr Thr Thr Gly Cys Ala Ala Cys Ala Ala Cys Thr Cys Thr Ala Thr
2625 2630 2635 2640
Gly Ala Ala Thr Thr Gly Gly Cys Thr Cys Ala Thr Thr Thr Thr

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| 2660 | 2665 | 2670 |
| Ala Cys Thr Thr Cys Thr Ala Gly Ala Gly Ala Gly Thr Thr Ala | | |
| 2675 | 2680 | 2685 |
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| 2690 | 2695 | 2700 |
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| 2705 | 2710 | 2715 |
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| 2720 | 2725 | 2730 |
| Cys Cys Cys Ala Gly Gly Ala Gly Thr Cys Cys Gly Gly Thr Gly Cys | | |
| 2735 | 2740 | 2745 |
| Thr Thr Gly Cys Ala Thr Ala Ala Ala Thr Gly Ala Ala Ala Gly Gly | | |
| 2750 | 2755 | 2760 |
| Ala Thr Gly Ala Ala Thr Gly Ala Ala Cys Gly Gly Ala Thr Ala Thr | | |
| 2765 | 2770 | 2775 |
| Thr Gly Ala Gly Thr Gly Ala Gly Thr Gly Ala Gly Thr Gly Gly Ala | | |
| 2780 | 2785 | 2790 |
| Thr Gly Ala Ala Gly Gly Ala Ala Gly Gly Ala Gly Thr Ala Ala Ala | | |
| 2795 | 2800 | 2805 |
| Gly Gly Ala Gly Ala Gly Gly Cys Ala Thr Gly Ala Ala Thr Gly | | |
| 2810 | 2815 | 2820 |
| Ala Ala Thr Gly Ala Gly Ala Gly Gly Thr Ala Gly Ala Ala Cys | | |
| 2825 | 2830 | 2835 |
| Thr Cys Cys Ala Ala Gly Ala Cys Cys Cys Thr Thr Ala Gly Ala | | |
| 2840 | 2845 | 2850 |
| Ala Cys Cys Thr Cys Gly Thr Cys Thr Gly Ala Thr Gly Thr Thr Cys | | |
| 2855 | 2860 | 2865 |
| Cys Cys Ala Thr Thr Thr Ala Cys Ala Gly Ala Cys Ala Gly Ala | | |
| 2870 | 2875 | 2880 |
| Ala Ala Ala Cys Thr Gly Ala Gly Thr Cys Cys Thr Ala Gly Ala Cys | | |
| 2885 | 2890 | 2895 |
| Ala Gly Ala Gly Gly Cys Cys Thr Ala Gly Ala Gly Gly Ala Gly Gly | | |
| 2900 | 2905 | 2910 |
| Cys Cys Ala Ala Gly Ala Gly Gly Thr Gly Gly Thr Gly Gly Gly | | |
| 2915 | 2920 | 2925 |
| Cys Cys Ala Ala Gly Ala Gly Gly Thr Gly Gly Thr Gly Gly Gly | | |
| 2930 | 2935 | 2940 |
| Cys Cys Ala Gly Gly Thr Cys Gly Gly Gly Gly Gly Gly Cys Cys | | |
| 2945 | 2950 | 2955 |
| Cys Thr Gly Ala Thr Gly Cys Cys Thr Gly Cys Thr Thr Cys Thr Cys | | |
| 2960 | 2965 | 2970 |
| Thr Cys Gly Cys Thr Thr Thr Gly Thr Gly Cys Ala Gly Cys Cys | | |
| 2975 | 2980 | 2985 |
| Cys Cys Gly Ala Gly Cys Cys Ala Thr Gly Ala Thr Gly Ala Ala Gly | | |
| 2990 | 2995 | 3000 |
| Ala Cys Thr Thr Thr Gly Thr Cys Cys Ala Gly Cys Gly Gly Gly Ala | | |
| 3005 | 3010 | 3015 |
| Ala Cys Thr Gly Cys Ala Cys Gly Cys Thr Cys Ala Gly Thr Gly Thr | | |
| 3020 | 3025 | 3030 |
| Gly Cys Cys Cys Gly Cys Cys Ala Ala Ala Ala Cys Thr Cys Ala | | |
| 3035 | 3040 | 3045 |
| Thr Ala Cys Cys Gly Cys Ala Thr Gly Gly Thr Gly Gly Thr Cys | | |
| 3050 | 3060 | 3065 |
| Thr Gly Gly Thr Gly Cys Cys Thr Cys Thr Cys Gly Gly Gly Thr | | |
| 3070 | 3075 | 3080 |
| Gly Gly Gly Cys Ala Ala Gly Ala Gly Cys Thr Cys Cys Ala Thr Cys | | |
| 3085 | 3090 | 3095 |
| 3100 | | |

Gly Thr Gly Thr Cys Thr Cys Gly Cys Thr Thr Cys Cys Thr Cys Ala
3105 3110 3115 3120
Ala Thr Gly Gly Cys Cys Gly Cys Thr Thr Thr Gly Ala Gly Gly Ala
3125 3130 3135
Cys Cys Ala Gly Thr Ala Cys Ala Cys Cys Cys Ala Cys Cys
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Ala Thr Cys Gly Ala Gly Gly Ala Cys Thr Thr Cys Cys Ala Cys Cys
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Gly Thr Ala Ala Gly Gly Thr Ala Thr Ala Cys Ala Ala Cys Ala Thr
3170 3175 3180
Cys Cys Gly Cys Gly Gly Cys Gly Ala Cys Ala Thr Gly Thr Ala Cys
3185 3190 3195 3200
Cys Ala Gly Cys Thr Cys Gly Ala Cys Ala Thr Cys Cys Thr Gly Gly
3205 3210 3215
Ala Thr Ala Cys Cys Thr Cys Thr Gly Gly Cys Ala Ala Cys Cys Ala
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Cys Cys Cys Cys Thr Thr Cys Cys Cys Gly Cys Cys Ala Thr Gly
3235 3240 3245
Cys Gly Cys Ala Gly Gly Cys Thr Gly Thr Cys Cys Ala Thr Cys Cys
3250 3255 3260
Thr Cys Ala Cys Ala Gly Gly Thr Gly Ala Gly Gly Cys Cys Cys Ala
3265 3270 3275 3280
Cys Thr Gly Gly Cys Cys Thr Gly Gly Gly Cys Thr Gly Gly
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Gly Gly Cys Gly Gly Cys Ala Gly Gly Gly Cys Cys Ala Gly Gly Gly
3300 3305 3310
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Gly Cys Thr Gly Gly Cys Ala Cys Thr Thr Gly Gly Cys Ala Gly
3330 3335 3340
Thr Thr Thr Gly Cys Ala Thr Ala Gly Ala Cys Thr Thr Gly Cys Ala
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Thr Ala Gly Cys Cys Ala Thr Cys Gly Thr Cys Thr Gly Ala Gly Ala
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Cys Ala Gly Cys Gly Thr Cys Ala Thr Cys Cys Cys Thr Gly Cys
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3395 3400 3405
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Thr Gly Gly Ala Ala Ala Thr Ala Gly Thr Gly Ala Thr Gly Ala Ala
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3445 3450 3455
Cys Cys Ala Thr Thr Cys Thr Gly Thr Thr Ala Gly Ala Cys Thr Cys
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Cys Ala Gly Ala Thr Cys Gly Ala Thr Thr Ala Cys Thr Cys Ala Thr
3475 3480 3485
Gly Gly Cys Thr Gly Thr Cys Gly Gly Gly Cys Cys Gly Cys Cys
3490 3495 3500
Thr Thr Cys Cys Ala Gly Ala Thr Cys Ala Gly Gly Ala Gly Cys Thr
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Gly Ala Thr Ala Cys Cys Ala Gly Cys Ala Thr Gly Cys Cys Cys Cys
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Ala Gly Gly Ala Thr Ala Thr Thr Cys Cys Thr Thr Cys Thr
3540 3545 3550
Ala Gly Gly Ala Ala Cys Ala Gly Ala Ala Thr Gly Ala Thr Gly

| | | |
|---|------|------|
| 3555 | 3560 | 3565 |
| Cys Cys Cys Thr Gly Gly Cys Thr Gly Cys Thr Cys Thr Thr | | |
| 3570 | 3575 | 3580 |
| Cys Cys Thr Thr Cys Thr Cys Cys Gly Gly Ala Ala Gly Ala Thr Gly | | |
| 3585 | 3590 | 3595 |
| 3600 | | |
| Ala Cys Cys Cys Ala Cys Cys Ala Gly Ala Gly Cys Thr Cys Cys Ala | | |
| 3605 | 3610 | 3615 |
| Gly Gly Gly Cys Cys Cys Ala Ala Gly Gly Thr Cys Ala Gly Thr Cys | | |
| 3620 | 3625 | 3630 |
| Cys Ala Cys Gly Gly Cys Thr Cys Ala Gly Gly Thr Cys Thr | | |
| 3635 | 3640 | 3645 |
| Cys Cys Cys Ala Cys Ala Cys Cys Cys Ala Gly Gly Cys Cys Thr | | |
| 3650 | 3655 | 3660 |
| Thr Thr Gly Cys Cys Ala Cys Cys Thr Cys Cys Thr Ala Gly Ala Gly | | |
| 3665 | 3670 | 3675 |
| 3680 | | |
| Ala Gly Gly Thr Ala Ala Gly Gly Cys Ala Gly Gly Ala Cys Cys | | |
| 3685 | 3690 | 3695 |
| Cys Ala Gly Gly Cys Ala Gly Thr Gly Ala Thr Cys Ala Cys Cys Ala | | |
| 3700 | 3705 | 3710 |
| Ala Ala Gly Gly Ala Ala Gly Gly Gly Cys Thr Thr Gly | | |
| 3715 | 3720 | 3725 |
| Gly Thr Cys Ala Thr Gly Gly Thr Cys Ala Thr Ala Gly Thr Gly Ala | | |
| 3730 | 3735 | 3740 |
| Thr Gly Gly Thr Gly Ala Thr Gly Gly Cys Ala Cys Thr Ala Gly Cys | | |
| 3745 | 3750 | 3755 |
| 3760 | | |
| Thr Gly Ala Cys Ala Cys Thr Thr Ala Thr Cys Ala Gly Ala Ala Gly | | |
| 3765 | 3770 | 3775 |
| Cys Thr Ala Thr Gly Gly Cys Cys Thr Gly Gly Cys Cys Cys Thr | | |
| 3780 | 3785 | 3790 |
| Gly Thr Thr Cys Thr Thr Ala Gly Ala Gly Cys Thr Thr Gly Gly Cys | | |
| 3795 | 3800 | 3805 |
| Ala Thr Gly Thr Ala Gly Thr Thr Thr Thr Thr Thr Gly Ala | | |
| 3810 | 3815 | 3820 |
| Ala Ala Cys Ala Gly Ala Gly Thr Cys Thr Cys Gly Cys Thr Cys Thr | | |
| 3825 | 3830 | 3835 |
| 3840 | | |
| Gly Thr Cys Ala Cys Cys Cys Ala Gly Gly Cys Thr Gly Gly Ala Gly | | |
| 3845 | 3850 | 3855 |
| Thr Gly Cys Ala Gly Thr Gly Gly Cys Gly Ala Thr Cys Thr | | |
| 3860 | 3865 | 3870 |
| Cys Gly Gly Cys Thr Cys Ala Cys Thr Gly Cys Ala Ala Cys Cys Thr | | |
| 3875 | 3880 | 3885 |
| Cys Thr Gly Cys Cys Thr Cys Cys Gly Gly Thr Thr Cys Ala | | |
| 3890 | 3895 | 3900 |
| Ala Gly Cys Gly Ala Thr Thr Cys Thr Cys Cys Thr Gly Cys Cys Thr | | |
| 3905 | 3910 | 3915 |
| 3920 | | |
| Cys Ala Gly Thr Cys Cys Cys Cys Ala Ala Gly Thr Ala Gly Cys | | |
| 3925 | 3930 | 3935 |
| Thr Gly Gly Ala Cys Thr Ala Cys Ala Gly Gly Cys Ala Cys Gly | | |
| 3940 | 3945 | 3950 |
| Thr Gly Cys Cys Ala Cys Cys Ala Thr Gly Cys Cys Cys Gly Gly Cys | | |
| 3955 | 3960 | 3965 |
| Thr Ala Ala Thr Thr Thr Thr Gly Thr Ala Thr Thr Thr Thr | | |
| 3970 | 3975 | 3980 |
| Thr Ala Cys Thr Ala Gly Ala Cys Gly Gly Gly Ala Thr Thr | | |
| 3985 | 3990 | 3995 |
| 4000 | | |
| Thr Cys Ala Cys Cys Ala Thr Gly Thr Thr Ala Gly Cys Cys Ala Gly | | |
| 4005 | 4010 | 4015 |

Gly Ala Thr Gly Gly Thr Cys Thr Cys Gly Ala Thr Cys Thr Cys Cys
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Cys Thr Ala Cys Cys Thr Cys Ala Gly Cys Cys Thr Cys Cys Cys Ala
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Ala Ala Gly Thr Gly Cys Thr Gly Ala Gly Ala Thr Thr Ala Cys Ala
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Gly Gly Cys Gly Thr Cys Ala Gly Cys Cys Ala Cys Cys Gly Cys Gly
4085 4090 4095
Gly Cys Cys Ala Gly Cys Cys Ala Gly Cys Ala Thr Gly Thr Ala Gly
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Thr Thr Ala Thr Thr Ala Ala Cys Cys Thr Cys Ala Cys Ala
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Thr Cys Cys Cys Thr Thr Thr Ala Cys Ala Gly Gly Thr Gly
4145 4150 4155 4160
Gly Gly Gly Ala Ala Ala Cys Thr Gly Ala Ala Gly Cys Cys Cys Ala
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Cys Ala Cys Thr Cys Cys Ala Gly Thr Gly Gly Thr Ala Gly Cys Ala
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Cys Ala Gly Cys Thr Cys Gly Thr Ala Ala Ala Gly Gly Cys Ala Gly
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Cys Ala Gly Ala Cys Ala Ala Ala Gly Cys Cys Ala Thr Ala Cys Cys
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Ala Cys Ala Gly Cys Cys Thr Cys Thr Cys Ala Gly Cys Cys Cys Thr
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Gly Cys Thr Gly Gly Ala Ala Gly Gly Gly Thr Gly Ala Gly Gly
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Ala Gly Gly Ala Cys Ala Gly Gly Ala Gly Gly Thr Thr Gly
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Cys Gly Gly Ala Cys Cys Cys Ala Gly Cys Ala Cys Cys Thr Gly
4385 4390 4395 4400
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Cys Cys Gly Cys Thr Gly Cys Thr Thr Cys Cys Thr Gly Gly Cys Thr
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Thr Thr Gly Thr Ala Cys Cys Thr Cys Gly Ala Gly Gly Cys Ala Ala
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 Gly Thr Cys Thr Gly Gly Cys Ala Thr Gly Gly Ala Gly Cys Cys Thr

5380 5385 5390
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 5810 5815 5820
 Cys Ala Cys Cys Thr Cys Cys Cys Ala Thr Cys Cys Ala Thr Thr Cys
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Ala Gly Gly Cys Thr Thr Cys Cys Thr Thr Gly Gly Thr Thr Ala Ala
 5845 5850 5855
 Cys Ala Cys Thr Gly Ala Cys Thr Gly Thr Gly Cys Cys Ala
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 Gly Gly Cys Cys Cys Thr Gly Gly Gly Ala Gly Ala Cys Cys Ala
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 6275 6280 6285
 Ala Ala Ala Ala Ala Thr Ala Cys Ala Ala Ala Ala Ala Thr

| | | |
|---|------|------|
| 6290 | 6295 | 6300 |
| Thr Ala Gly Cys Cys Ala Gly Gly Thr Gly Thr Gly Thr Gly Ala | | |
| 6305 | 6310 | 6315 |
| Thr Gly Gly Cys Ala Cys Cys Thr Gly Thr Ala Ala Thr Cys Cys | | 6320 |
| 6325 | 6330 | 6335 |
| Cys Ala Gly Thr Thr Ala Cys Thr Cys Gly Gly Ala Gly Gly Cys | | |
| 6340 | 6345 | 6350 |
| Thr Gly Ala Gly Gly Cys Ala Gly Gly Ala Gly Ala Thr Cys Thr | | |
| 6355 | 6360 | 6365 |
| Cys Thr Thr Gly Ala Ala Cys Cys Ala Gly Gly Ala Gly Gly Thr | | |
| 6370 | 6375 | 6380 |
| Gly Gly Ala Gly Gly Thr Thr Gly Cys Ala Gly Thr Gly Ala Gly Cys | | |
| 6385 | 6390 | 6395 |
| 6400 | | |
| Thr Gly Ala Gly Ala Thr Cys Thr Gly Cys Cys Ala Thr Thr Gly | | |
| 6405 | 6410 | 6415 |
| Cys Ala Thr Thr Cys Cys Ala Gly Gly Cys Thr Gly Gly Cys Ala | | |
| 6420 | 6425 | 6430 |
| Ala Cys Ala Ala Gly Ala Gly Thr Gly Ala Ala Cys Thr Cys Thr | | |
| 6435 | 6440 | 6445 |
| Gly Thr Cys Thr Cys Ala Gly Ala Ala Ala Thr Ala Ala Ala Thr | | |
| 6450 | 6455 | 6460 |
| Ala Ala Ala Thr Ala Ala Ala Thr Ala Ala Ala Thr Ala Ala Ala Ala | | |
| 6465 | 6470 | 6475 |
| 6480 | | |
| Ala Ala Thr Ala Gly Cys Thr Ala Gly Gly Cys Ala Thr Gly Gly Thr | | |
| 6485 | 6490 | 6495 |
| Gly Ala Cys Ala Gly Gly Cys Gly Cys Cys Thr Gly Thr Ala Ala Thr | | |
| 6500 | 6505 | 6510 |
| Cys Cys Cys Ala Gly Cys Thr Gly Cys Thr Cys Cys Ala Gly Ala Gly | | |
| 6515 | 6520 | 6525 |
| Gly Cys Thr Gly Ala Gly Gly Cys Ala Gly Gly Ala Gly Ala Ala Thr | | |
| 6530 | 6535 | 6540 |
| Cys Gly Cys Thr Thr Ala Ala Ala Cys Cys Cys Ala Gly Gly Ala Gly | | |
| 6545 | 6550 | 6555 |
| 6560 | | |
| Gly Thr Gly Gly Ala Ala Gly Thr Thr Gly Cys Ala Gly Thr Gly Ala | | |
| 6565 | 6570 | 6575 |
| Gly Cys Cys Ala Ala Gly Ala Thr Cys Ala Cys Ala Cys Cys Ala Cys | | |
| 6580 | 6585 | 6590 |
| Thr Gly Cys Ala Cys Thr Cys Cys Ala Gly Cys Cys Thr Gly Gly Gly | | |
| 6595 | 6600 | 6605 |
| Cys Cys Ala Cys Ala Gly Ala Gly Ala Ala Gly Ala Cys Thr Cys | | |
| 6610 | 6615 | 6620 |
| Cys Ala Thr Cys Thr Cys Ala | | |
| 6625 | 6630 | 6635 |
| 6640 | | |
| Ala Gly | | |
| 6645 | 6650 | 6655 |
| Thr Thr Thr Ala Ala Gly Cys Ala Ala Ala Ala Gly Thr Gly Ala Gly | | |
| 6660 | 6665 | 6670 |
| Gly Ala Ala Gly Gly Thr Gly Cys Thr Thr Ala Thr Thr Ala Ala Ala | | |
| 6675 | 6680 | 6685 |
| Ala Gly Cys Thr Gly Gly Ala Ala Ala Thr Cys Ala Gly Gly Ala Thr | | |
| 6690 | 6695 | 6700 |
| Gly Gly Ala Gly Gly Thr Ala Cys Cys Ala Gly Thr Cys Cys Ala Gly | | |
| 6705 | 6710 | 6715 |
| 6720 | | |
| Ala Cys Ala Gly Cys Cys Thr Cys Cys Cys Cys Ala Cys Cys Ala Cys | | |
| 6725 | 6730 | 6735 |
| Cys Cys Cys Ala Cys Cys Gly Thr Cys Thr Cys Cys Ala Cys Ala Gly | | |
| 6740 | 6745 | 6750 |

Cys Ala Gly Cys Cys Cys Cys Thr Gly Thr Thr Cys Ala Gly Ala
 6755 6760 6765
 Thr Thr Cys Ala Cys Ala Ala Gly Cys Cys Thr Gly Cys Cys Thr Thr
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 Cys Ala Thr Cys Thr Cys Ala Thr Gly Ala Ala Ala Cys Ala Gly

| | | |
|---|------|------|
| 7205 | 7210 | 7215 |
| Ala Cys Ala Gly Ala Gly Ala Ala Ala Cys Thr Gly Ala Gly Gly Thr | | |
| 7220 | 7225 | 7230 |
| Thr Ala Cys Ala Gly Ala Gly Thr Thr Thr Cys Gly Thr Gly Ala | | |
| 7235 | 7240 | 7245 |
| Thr Cys Thr Gly Cys Cys Cys Ala Ala Gly Thr Cys Thr Gly Cys Thr | | |
| 7250 | 7255 | 7260 |
| Gly Gly Cys Ala Gly Cys Thr Ala Ala Gly Cys Gly Gly Ala Thr Gly | | |
| 7265 | 7270 | 7275 |
| 7280 | | |
| Ala Gly Gly Cys Cys Ala Gly Ala Thr Gly Cys Ala Ala Ala Cys Thr | | |
| 7285 | 7290 | 7295 |
| Ala Gly Gly Cys Ala Thr Thr Gly Ala Gly Cys Ala Ala Gly Ala Cys | | |
| 7300 | 7305 | 7310 |
| Ala Gly Gly Cys Ala Gly Gly Ala Cys Cys Cys Cys Thr Gly Cys Thr | | |
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| Claim | Independent | Dependent |
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| 22. | 1 | |
| 23. | | 1 |
| 24. | | |
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| 28. | | |
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| 30. | | |
| Total | 6 | 17 |

23 Total : 25

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:NEELAM et al

Serial No.09/778,963

Filed: February 8, 2001

For: ISOLATED HUMAN RAS-LIKE
PROTEINS, NUCLEIC ACID MOLECULES
ENCODING THESE HUMAN RAS-LIKE
PROTEINS, AND USES THEREOF



Art Unit:

Examiner:

Atty. Docket: CL001112

**SUBMISSION OF SEQUENCE LISTING
UNDER 37 C.F.R. § 1.821(a)**

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

In compliance with 37 C.F.R. § 1.821(a), Applicants submit the Sequence Listing,
including the paper copy of the Sequence Listing and the computer readable copy of the
Sequence Listing.

In the Specification:

Please enter the Sequence Listing between the specification and the claims of the
above-identified application.

REMARKS

In accordance with 37 C.F.R. § 1.821(f), the paper copy of the Sequence Listing and the computer readable copy of the Sequence Listing submitted herewith in the above application are the same.

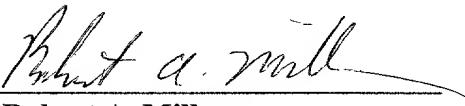
In accordance with 37 C.F.R. § 1.821(g), this submission includes no new matter.

It is respectfully believed this application is now in condition for examination.

Early notice to this effect is earnestly solicited.

Respectfully submitted,

CELERA GENOMICS

By: 
Robert A. Millman
Reg. No. 36,217

Date: May 8, 2001

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